

Appl. No. : 09/377,447
Filed : August 19, 1999

139 53. (New) The method as in Claim 51, wherein analyzing the activity history data comprises substantially excluding from consideration activity history data falling outside a selected look-back period, so that calculated item popularity levels strongly reflect current interests of users.

54. (New) The method as in Claim 51, wherein analyzing the activity history data comprises applying a censored chi-square type algorithm to the activity history data.

55. (New) The method as in Claim 51, wherein the method comprises identifying, for each organization-specific group, a set of items that distinguish the respective organization-specific group from the general population of users.

139 56. (New) The method as in Claim 51, wherein at least some of the organizations are companies.

57. (New) A computer system that embodies the method of Claim 51.

REMARKS

The foregoing amendment is responsive to the Office Action mailed on June 19, 2002. Applicants' representative would like to initially thank Examiner Zurita, and his supervisor Wynn Coggins, for the courtesy they extended during the interview conducted on October 15, 2002.

I. Summary of the amendments

By the foregoing amendment, Claim 1 and 35 has been amended to correct minor errors discovered during a review of the claims. In addition, several claims have been amended to replace "history data" with either "activity history data" or "user activity history data," as suggested by Ms. Coggins to improve clarity. Further, new Claims 51-57 have been added to the application.

The amendments made to the pending claims are shown in redline form on the attached pages. No new matter has been added.

II. Double-patenting rejection

Applicants request that the provisional obviousness-type double patenting rejection over co-pending Appl. No. 09/377,322 be held in abeyance while that application remains pending.

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III. Art-based rejection

As discussed during the interview, all of the rejected independent claims of the present application recite features that are neither disclosed nor suggested by Linden (U.S. Patent 6,266,649). The obviousness rejection of Claims 1-50 is therefore improper. The following are examples of some of the claim features that Linden fails to disclose or suggest:

- With respect to independent Claim 1, Linden does not disclose or suggest “processing at least the purchase history data to identify at least one item which, based on actions of both members and non-members of a selected community of said plurality of user communities, has become popular within the selected community relative to its popularity outside the selected community.” In addition, Linden does not disclose or suggest “electronically notifying users that the at least one item is popular within the selected community.” In connection with these limitations, the recommendations algorithm of Linden seeks to recommend items that are similar to those items already known to be of interest to the target user, regardless of whether these recommended items are “popular” generally or within specific communities.
- With respect to independent Claim 12, Linden does not disclose or suggest “a computer process which analyzes at least the purchase history data to identify items that are popular within particular communities of the plurality of communities relative to their respective popularity levels among a general user population, and which notifies users of the sales system of the items that are popular within particular communities.”
- With respect to independent Claim 26, Linden does not disclose or suggest “identifying a subset of users of the store that have email addresses that satisfy a particular criteria, wherein the subset comprises a plurality of users,” and “identifying at least one item that is popular among the subset of users, wherein the step of identifying comprises processing purchase history data of the subset of users and of users falling outside said subset.”

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- With respect to independent Claim 32, Linden does not disclose or suggest “processing the activity history data of the general population of users, including the subset of users, to identify a set of items that distinguish the subset from the general population.”
- With respect to independent Claim 43, Linden does not disclose or suggest “identifying, among a population of users of the electronic catalog, a subset of users that, based on user shipping addresses, reside in a common geographic region,” in combination with “processing the user activity history data to identify an item that is relatively popular among the subset of users in comparison to a popularity level of the item among the population of users.” In addition, Linden does not disclose or suggest “notifying at least one user that the item is popular within the geographic region.”

In connection with some of the claim features recited above, the Examiner appears to take the position that because it was known to store customer account information such as email addresses, shipping addresses, and purchase histories in a database of an online sales system, it would have been obvious to analyze such data as set forth in the present application. Applicants respectfully disagree. Under such a theory, *any* new computer process for analyzing preexisting data of a prior art database would be unpatentable over that database. Obviousness over Linden depends not on whether the claimed processing methods *could* be performed on the user account data disclosed in Linden, but rather on whether Linden actually discloses or suggests such processing methods.

With respect to the Examiner’s assertions regarding statistical analysis tools and algorithms used in the field of marketing, Applicants respectfully request that the Examiner identify specific prior art references that disclose such analysis tools and algorithms.

For the reasons set forth above and discussed in further detail during the interview, Applicants respectfully submit that the obviousness rejection is improper, and request that the rejection be withdrawn.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Twice amended) A method of assisting users in selecting items from an electronic catalog of items, the catalog accessible to users of an online sales system that provides services for allowing users to purchase items from the catalog, the method comprising:

providing a database which contains information about a plurality of user communities, wherein different communities represent different subsets of users of the [store]sales system;

tracking online purchases of items from the sales system by the users to generate purchase history data, and storing the purchase history data in a computer memory;

processing at least the purchase history data to identify at least one item which, based on actions of both members and non-members of a selected community of said plurality of user communities, has become popular within the selected community relative to its popularity outside the selected community; and

electronically notifying users that the at least one item is popular within the selected community.

32. (Twice amended) A method of recommending items from a catalog of items, comprising:

identifying a subset of a general population of users;

tracking at least one type of user activity that indicates user affinities for particular items of the catalog to generate activity history data;

processing the activity history data of the general population of users, including the subset of users, to identify a set of items that distinguish the subset from the general population; and

recommending items from the set of items to members of the subset.

33. (Twice amended) The method of Claim 32, wherein processing the activity history data comprises processing purchase history data, and the set of items consists essentially of items purchased by members of the subset.

35. (Amended) The method of Claim 32, wherein processing the [purchase]activity history data comprises applying a censored chi-square algorithm to the activity history data.

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43. (Amended) A method of assisting users in selecting items from an electronic catalog of items, comprising:

identifying, among a population of users of the electronic catalog, a subset of users that, based on user shipping addresses, reside in a common geographic region;

monitoring actions of the subset of users, and of users falling outside the subset, to generate user activity history data reflective of user actions performed with respect to items in the electronic catalog;

processing the user activity history data to identify an item that is relatively popular among the subset of users in comparison to a popularity level of the item among the population of users; and

notifying at least one user that the item is popular within the geographic region.

44. (Amended) The method as in Claim 43, wherein processing the user activity history data to identify an item that is relatively popular among the subset of users comprises at least one of (a) comparing a velocity of the item within the subset to a velocity of the item within a general user population; and (b) comparing an acceleration of the item within the subset to an acceleration of the item within a general user population.

45. (Amended) The method as in Claim 43, wherein processing the user activity history data to identify an item that is relatively popular among the subset of users comprises applying a censored chi-square type algorithm to the user activity history data.

50. (Amended) The method as in Claim 43, wherein processing the user activity history data comprises applying a time window to the user activity history data such that popularity of the item is measured substantially from a most recent set of the user activity history data.

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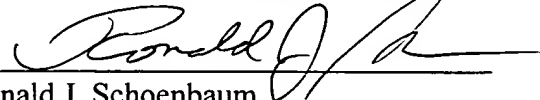
IV. Conclusion

If any issues remain which can potentially be resolved by telephone, the Examiner is invited to call the undersigned attorney of record at his direct dial number listed below.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

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